

SSSSSSSS SSSSSSSS TTTTTTTTTT DDDDDDDDD
SSSSSSSS SSSSSSSS TTTTTTTTTT DDDDDDDDD
SS SS TT DD
SSSSSSSS SSSSSSSS TTTTTTTTTT DDDDDDDDD
SSSSSSSS SSSSSSSS TTTTTTTTTT DDDDDDDDD

LL LL IIIIIIII SSSSSSSS
LL LL IIIIIIII SSSSSSSS
LL LL IIIIIIII SS SS
LL LL IIIIIIII SS SS
LL LL IIIIIIII SSSSSSSS
LL LL IIIIIIII SSSSSSSS
LL LL IIIIIIII SS SS
LL LL IIIIIIII SSSSSSSS
LLLLLLLLLL LLLL LLLL IIIIIIII SSSSSSSS
LLLLLLLLLL LLLL LLLL IIIIIIII SSSSSSSS

```
1 0001 0 XTITLE 'Processes .STANDARD command'
2 0002 0 MODULE STD (IDENT = 'VO4-000'
3 0003 0           XBLISS32[,ADDRESSING_MODE ( EXTERNAL      = LONG_RELATIVE
4 0004 0                   NONEXTERNAL    = LONG_RELATIVE)]
5 0005 0           ) =
6 0006 1 BEGIN
7 0007 1
8 0008 1 *****
9 0009 1 *
10 0010 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
11 0011 1 * DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
12 0012 1 * ALL RIGHTS RESERVED.
13 0013 1 *
14 0014 1 * THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
15 0015 1 * ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
16 0016 1 * INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
17 0017 1 * COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
18 0018 1 * OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
19 0019 1 * TRANSFERRED.
20 0020 1 *
21 0021 1 * THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
22 0022 1 * AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
23 0023 1 * CORPORATION.
24 0024 1 *
25 0025 1 * DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
26 0026 1 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
27 0027 1 *
28 0028 1 *
29 0029 1 *****
30 0030 1
31 0031 1 ++
32 0032 1 FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS
33 0033 1
34 0034 1 ABSTRACT: Processes the .STANDARD command
35 0035 1
36 0036 1 ENVIRONMENT: Transportable
37 0037 1
38 0038 1 AUTHOR: R.W.Friday   CREATION DATE: August, 1978
39 0039 1
```

: 41 0040 1 %SBTTL 'Revision History'
: 42 0041 1
: 43 0042 1 MODIFIED BY:
: 44 0043 1
: 45 0044 1 005 KFA00005 Ken Alden 5-Jul-1983
: 46 0045 1 Fixed sca_justify so it works correctly with gca_autojust.
: 47 0046 1
: 48 0047 1 004 KFA00004 Ken Alden 28-Mar-1983
: 49 0048 1 In SDXY the right margin is no longer reset(to gca_lwidth).
: 50 0049 1
: 51 0050 1 003 REM00003 Ray Marshall 07-Mar-1983
: 52 0051 1 Global edit of all modules. Updated module names, idents,
: 53 0052 1 copyright dates. Changed require files to BLISS library.
: 54 0053 1
: 55 0054 1 --

```
57      0055 1 %SBTTL 'Module Level Declarations'  
58      0056 1 !  
59      0057 1 ! TABLE OF CONTENTS:  
60      0058 1 !  
61      0059 1 !  
62      0060 1 FORWARD ROUTINE  
63      0061 1 SDXY : NOVALUE;  
64      0062 1 !  
65      0063 1 !  
66      0064 1 ! INCLUDE FILES:  
67      0065 1 !  
68      0066 1 !  
69      0067 1 LIBRARY 'NXPORT:XPORT';           ! XPORT Library  
70      0068 1 REQUIRE 'REQ:RNODEF';            ! RUNOFF variant definitions  
71      0199 1 !  
U 0200 1 %IF DSRPLUS %THEN  
U 0201 1 LIBRARY 'REQ:DPLLIB';             ! DSRPLUS BLISS Library  
74      0202 1 %ELSE  
75      0203 1 LIBRARY 'REQ:DSRLIB';           ! DSR BLISS Library  
76      0204 1 %FI  
77      0205 1 !  
78      0206 1 !  
79      0207 1 ! MACROS:  
80      0208 1 !  
81      0209 1 !  
82      0210 1 ! EQUATED SYMBOLS:  
83      0211 1 !  
84      0212 1 !  
85      0213 1 ! OWN STORAGE:  
86      0214 1 !  
87      0215 1 !  
88      0216 1 ! EXTERNAL REFERENCES:  
89      0217 1 !  
90      0218 1 !  
91      0219 1 EXTERNAL  
92      0220 1 GCA : GCA DEFINITION.  
93      0221 1 IRA : FIXED STRING.  
94      0222 1 NUMPRM : NUMPRM DEFINE.  
95      0223 1 PDT : REF PDT DEFINITION.  
96      0224 1 PHAN : PHAN DEFINITION.  
97      0225 1 SCA : SCA_DEFINITION;  
98      0226 1 !  
99      0227 1 EXTERNAL LITERAL           !Error messages  
100     0228 1 RNFINM;  
101     0229 1 !  
102     0230 1 EXTERNAL ROUTINE  
103     0231 1 ERMA,  
104     0232 1 REMNEG,  
105     0233 1 REMMRG,  
106     0234 1 SETCAS,  
107     0235 1 TSTBLK;  
108     0236 1 !
```

```
: 110 0237 1 %SBTTL 'STD --'  
.: 111 0238 1 GLOBAL ROUTINE std (handler_code) : NOVALUE =  
.: 112 0239 1  
.: 113 0240 1 !++  
.: 114 0241 1 FUNCTIONAL DESCRIPTION:  
.: 115 0242 1 See the ABSTRACT, above.  
.: 116 0243 1  
.: 117 0244 1 FORMAL PARAMETERS:  
.: 118 0245 1  
.: 119 0246 1 HANDLER_CODE is passed for conformance only.  
.: 120 0247 1  
.: 121 0248 1  
.: 122 0249 1 IMPLICIT INPUTS:  
.: 123 0250 1  
.: 124 0251 1 NUMPRM contains a number as processed by GETNUM.  
.: 125 0252 1  
.: 126 0253 1 IMPLICIT OUTPUTS: None  
.: 127 0254 1  
.: 128 0255 1 ROUTINE VALUE:  
.: 129 0256 1 COMPLETION CODES: None  
.: 130 0257 1  
.: 131 0258 1 SIDE EFFECTS: None  
.: 132 0259 1  
.: 133 0260 1 !--  
.: 134 0261 1  
.: 135 0262 2 BEGIN  
.: 136 0263 2  
.: 137 0264 2 tstblk (0); !Force .LISTs and .NOTEs to end, and  
.: 138 0265 2 !issue error messages if applicable.  
.: 139 0266 2 remmrg (); !Report unreported bad margins.  
.: 140 0267 2 remneg (); !Report unreported bad backdents.  
.: 141 0268 2  
.: 142 0269 2 IF NOT .num_result THEN ! If no argument given by user,  
.: 143 0270 2 num_value = .gca_lwidth ! use current page width.  
.: 144 0271 2  
.: 145 0272 2 ELSE ! Otherwise:  
.: 146 0273 3 BEGIN  
.: 147 0274 3 IF .num_sign NEQ 0 THEN ! If a signed number, Try adjusting  
.: 148 0275 3 num_value = .num_value + .gca_lwidth ! current page width.  
.: 149 0276 3 ELSE  
.: 150 0277 3 IF .num_length EQL 0 THEN ! Otherwise, if user said nothing,  
.: 151 0278 3 num_value = .gca_lwidth; ! ! use current page width  
.: 152 0279 3 IF .num_value LEQ 0 THEN ! If negative number,  
.: 153 0280 4 BEGIN  
.: 154 0281 4 erma (rnfinm, false); ! report error and  
.: 155 0282 4 num_value = .gca_lwidth; ! retain current line width.  
.: 156 0283 3 END;  
.: 157 0284 2 END;  
.: 158 0285 2  
.: 159 0286 2 gca_lwidth = .num_value;  
.: 160 0287 2  
.: 161 0288 2 !Set lines per page based on page width.  
.: 162 0289 2  
.: 163 0290 2 IF .gca_lwidth EQL 60 THEN  
.: 164 0291 2 phan_llines = 58  
.: 165 0292 2 ELSE  
.: 166 0293 2
```

STD
V04-000

Processes .STANDARD command
STD --

1-8
16-Sep-1984 01:49:18
14-Sep-1984 13:08:12
VAX-11 Bliss-32 V4.0-742
DISKSVMMASTER:[RUNOFF.SRC]STD.BLI;1 Page 5
(4)

```
: 167 0294 2 IF .gca_lwidth EQL 70
: 168 0295 2 THEN phan_llines = 74;
: 169 0296 2
: 170 0297 2
: 171 0298 2 !Check for top of page condition so that footnotes
: 172 0299 2 get taken care of ok.
: 173 0300 2
: 174 0301 2 IF .phan_lines_tp GEQ .phan_llines THEN
: 175 0302 2 phan_top_page = true;
: 176 0303 2
: 177 0304 2 pdt_indent = 0;
: 178 0305 2 sdxy ();
: 179 0306 1 END;
: 167 0294 2 !Finish resetting.
: 168 0295 2 !End of STD
```

.TITLE STD Processes .STANDARD command
.IDENT \V04-000\

.EXTRN GCA, IRA, NUMPRM
.EXTRN PDT, PHAN, SCA, RNFINM
.EXTRN ERMA, REMNEG, REMMRG
.EXTRN SETCAS, TSTBLK

.PSECT \$CODE\$, NOWRT, 2

			001C 00000	.ENTRY STD, Save R2,R3,R4	0238
			EF 9E 00002	MOVAB PHAN+4, R4	
			EF 9E 00009	MOVAB GCA+140, R3	
			EF 9E 00010	MOVAB NUMPRM+4, R2	
			7E D4 00017	CLRL -(SP)	
			01 FB 00019	CALLS #1, TSTBLK	0264
			00 FB 00020	CALLS #0, REMMRG	
			00 FB 00027	CALLS #0, REMNEG	0266
		27	A2 E9 0002E	BLBC NUMPRM, 3\$	0267
			A2 D5 00032	TSTL NUMPRM+8	0269
			06 13 00035	BEQL 1\$	0274
		62	00 B3 C0 00037	ADDL2 @GCA+140, NUMPRM+4	0275
			09 11 0003B	BRB 2\$	
			08 A2 D5 0003D	TSTL NUMPRM+12	0277
			04 12 00040	BNEQ 2\$	
		62	00 B3 D0 00042	MOVL @GCA+140, NUMPRM+4	0278
			62 D5 00046	TSTL NUMPRM+4	0279
			13 14 00048	BGTR 4\$	
			7E D4 0004A	CLRL -(SP)	0281
			8F DD 0004C	PUSHL #RNFINM	
			02 FB 00052	CALLS #2, ERMA	
		00 B3 00	B3 D0 00059	MOVL @GCA+140, NUMPRM+4	0282
		62 00	62 D0 0005D	MOVL NUMPRM+4, @GCA+140	0286
		3C 00	B3 D1 00061	CMPL @GCA+140, #60	0290
			06 12 00065	BNEQ 5\$	
		00 B4	3A D0 00067	MOVL #58, @PHAN+4	0291
			0F 11 0006B	BRB 6\$	
		00000046 8F	00 B3 D1 0006D	CMPL @GCA+140, #70	0294
			05 12 00075	BNEQ 6\$	
		00 B4 4A	8F 9A 00077	MOVZBL #74, @PHAN+4	0296
		00 B4 08	A4 D1 0007C	CMPL PHAN+12, @PHAN+4	0301
			04 19 00081	BLSS 7\$	

STD
V04-000

Processes .STANDARD command
STD --

J 8
16-Sep-1984 01:49:18 VAX-11 Bliss-32 V4.0-742
14-Sep-1984 13:08:12 DISK\$VMSMASTER:[RUNOFF.SRC]STD.BLI;1 Page 6
(4)

FC A4	00000000G	01 D0 00083	FF D4 00087	7\$: MOVL #1, PHAN	: 0302
00000000V EF		00 FB 0008D		CLRL @PDT	: 0304
		04 00094		CALLS #0, SDXY	: 0305
				RET	: 0306

; Routine Size: 149 bytes, Routine Base: \$CODE\$ + 0000

; 180 0307 1

```

: 182 0308 1 XSBTTL 'SDXY --'
: 183 0309 1 GLOBAL ROUTINE sdx : NOVALUE =
: 184 0310 1
: 185 0311 1 !++
: 186 0312 1 FUNCTIONAL DESCRIPTION:
: 187 0313 1
: 188 0314 1 Part of .STANDARD command common to .CHAPTER and .APPENDIX
: 189 0315 1
: 190 0316 1 FORMAL PARAMETERS: None
: 191 0317 1
: 192 0318 1 IMPLICIT INPUTS: None
: 193 0319 1
: 194 0320 1 IMPLICIT OUTPUTS: None
: 195 0321 1
: 196 0322 1 ROUTINE VALUE:
: 197 0323 1 COMPLETION CODES: None
: 198 0324 1
: 199 0325 1 SIDE EFFECTS: None
: 200 0326 1
: 201 0327 1 --
: 202 0328 1
: 203 0329 2 BEGIN
: 204 0330 2 phan_paging = .phan_cmd_paging; !Turn on paging if not /NOPAGING
: 205 0331 2 sca_fill = true;
: 206 0332 2 sca_justify = .gca_autojust or .sca_justify; !Turn on justification if the user didn't
: 207 0333 2 sca_crock = .gca_autojust; !say .NO AUTOJUSTIFY.
: 208 0334 2 sca_spacing = 1;
: 209 0335 2 sca_lm = 0;
: 210 0336 2
: 211 0337 2 setcas (.gca_case); ! Set case rules.
: 212 0338 2
: 213 0339 1 END; !End of SDXY

```

				.ENTRY SDXY, Save R2,R3	: 0309
				MOVAB GCA+16, R3	:
				MOVAB SCA+104, R2	0330
				MOVL PHAN+44, @PHAN+40	0331
				MOVL #1, @SCA+104	0332
				BISL2 @GCA+16, @SCA+100	0333
				MOVL @GCA+16, @SCA+112	0334
				MOVL #1, @SCA+124	0335
				CLRL @SCA+116	0337
				PUSHL @GCA+128	0339
				CALLS #1, SETCAS	
				RET	

: Routine Size: 59 bytes, Routine Base: \$CODE\$ + 0095

```

: 214 0340 1
: 215 0341 1 END
: 216 0342 0 ELUDOM !End of module

```

STD
V04-000

Processes .STANDARD command
SDXY --

L 8
16-Sep-1984 01:49:18
14-Sep-1984 13:08:12

VAX-11 Bliss-32 V4.0-742
DISK\$VMSMASTER:[RUNOFF.SRC]STD.BLI;1

Page 8
(5)

STK
V04

PSECT SUMMARY

Name	Bytes	Attributes
\$CODES	208	NOVEC,NOWRT, RD , EXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2)

Library Statistics

File	Total	Symbols Loaded	Percent	Pages Mapped	Processing Time
\$255\$DUA28:[SYSLIB]XPORT.L32:1	590	0	0	252	00:00.1
\$255\$DUA28:[RUNOFF.SRC]DSRLIB.L32:1	1248	29	2	86	00:00.3

COMMAND QUALIFIERS

BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LISS:STD/OBJ=OBJ\$:STD MSRC\$:STD/UPDATE=(ENH\$:STD)

Size: 208 code + 0 data bytes
Run Time: 00:05.1
Elapsed Time: 00:16.5
Lines/CPU Min: 4007
Lexemes/CPU-Min: 18691
Memory Used: 48 pages
Compilation Complete

0349 AH-BT13A-SE
VAX/VMS V4.0

DIGITAL EQUIPMENT CORPORATION
CONFIDENTIAL AND PROPRIETARY

